Watershed Assessment
Cooper Creek Watershed
Blue Ridge Ranger District
Chattahoochee-Oconee National Forests

INTRODUCTION

This watershed assessment includes 3 sixth-level HUCs. The largest is the Cooper Creek watershed (HUC# 060200030102) which contains 23,445 acres of National Forest lands. Due to logistical considerations related to potential vegetation management projects, the Youngcane Creek watershed (HUC# 060200020506) and Coosa Creek watershed (HUC# 060200020505) also were included in this assessment. There are 4,187 and 6,386 acres of National Forest lands in the Youngcane Creek and Coosa Creek Watersheds, respectively.

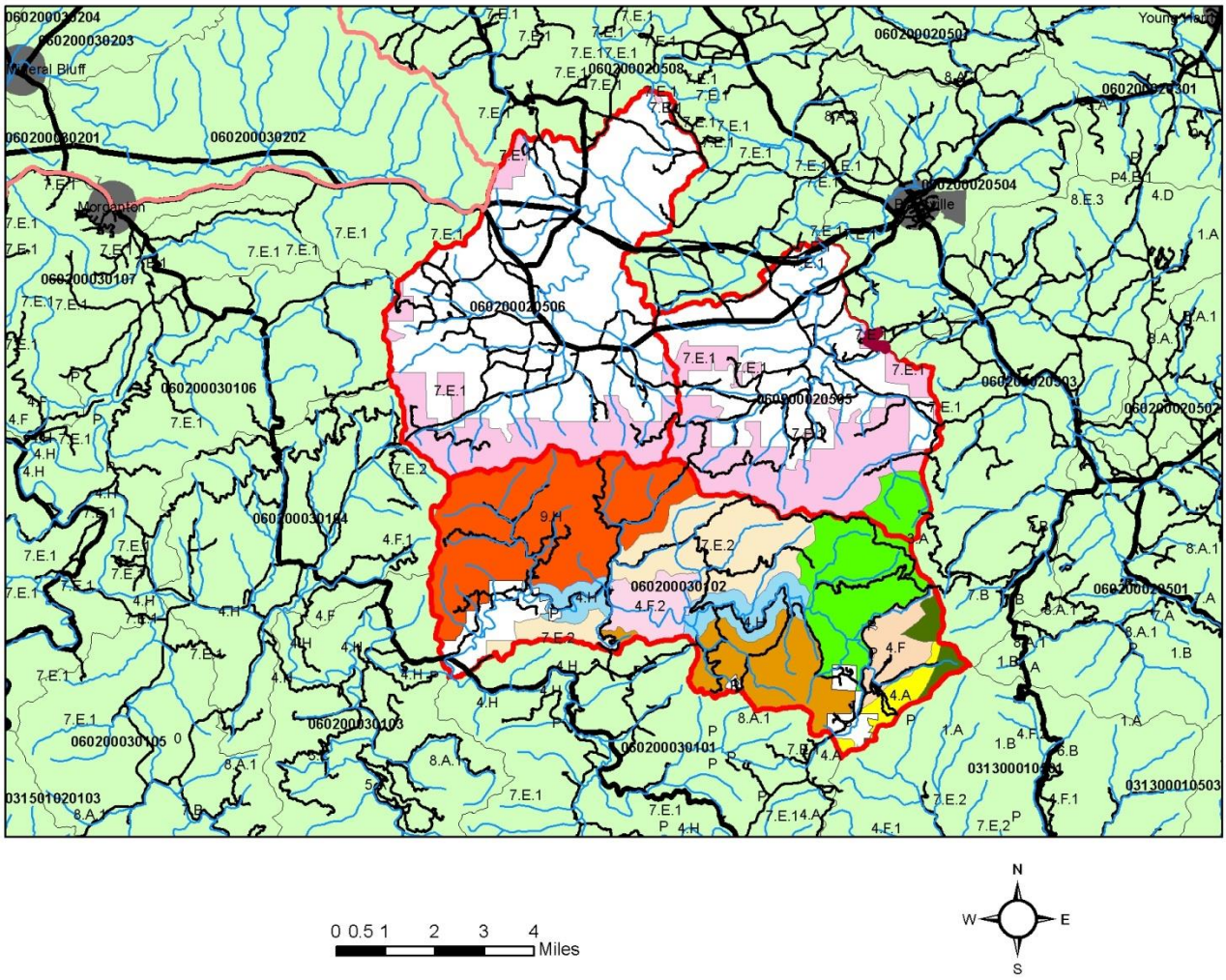
Watershed Number	Watershed Name	Acres of National Forest Lands	Acres of Private Lands	Total Acreage	Percent National Forest
060200020505	Coosa Creek	6,386	7,978	14,364	44 %
060200020506	Youngcane Creek	4,187	16,530	20,717	20 %
060200030102	Cooper Creek	23,445	1,845	25,290	93 %
	TOTAL	**34,018**	**26,353**	**60,371**	**56 %**

Eleven different Management Prescriptions (MRx) are represented in this assessment area. Together, MRx 7.E.1 (Dispersed Recreation Areas) and MRx 9.H (Management, Maintenance, and Restoration of Plant Associations) make up over half of the assessment area. A significant portion of the area also lies within the Cooper Creek Wildlife Management Area which is managed cooperatively with the Georgia Department of Natural Resources.

MRx	Name	Coosa Creek	Youngcane Creek	Cooper Creek	Acres
1.A	Designated Wilderness			556	556
3.A	National Scenic Area	828		3,417	4,245
4.A	Appalachian Trail Corridor			633	633
4.F	Scenic Areas			1,110	1,110
4.F.1	Scenic and Wildlife Mgt Areas			27	27
4.F.2	Regional Forester Scenic Areas			1,212	1,212
4.H	Outstandingly Remarkable Streams			1,845	1,845
7.E.1	Dispersed Recreation Areas	5,475	4,072	26	9,573
7.E.2	Dispersed Recreation Areas with Veg Mgt	28	16	4,317	4,360
8.A.1	Mid-to-Late Successional Forests			2,852	2,852
9.H	Mgt, Maintenance, and Restoration of Plant Associations	17	71	7,417	7,504
TOTAL		**6,348**	**4,158**	**23,410**	**33,917**

This watershed assessment was completed primarily through the use of existing data, supplemented with limited field work for some resource areas. Using these data, the Current Condition, Desired Future Condition, and Possible Management Practices/Opportunities were described for each resource area. In addition, related Forest Plan Goals and Objectives and Inventory Needs also were identified.

Cooper Creek Watershed



Resource Area: Terrestrial Wildlife Habitats- Successional Stage Habitat Distribution

Current Conditions – Approximately 82% of the analysis area is in mid-to-late successional condition (including old-growth) and approximately 53% is in late successional conditions. Early successional forest habitat is very limited in the analysis area and there currently is only approximately 200 acres of early succession forest habitat in the analysis area (0.6 %). This was created through the Cooper Creek Early Successional Habitat Project which was completed in 2004-2005.

Desired Future Conditions – Provide a diversity of successional stage habitats for native and other desired species of wildlife. The Forest Plan describes the Desired Future Condition and Successional Stage Objectives for each Management Prescription. For the Management Prescriptions within the analysis area, objectives for mid-to-late successional habitat range from 50 to 75% of the forested acres. These levels are currently being met within the analysis area. Objectives for early successional forest habitat range from 0 to 10 percent of the forested acres for the Management Prescriptions present in the analysis area. Management Prescriptions such as Dispersed Recreation Areas (7.E.1) and National Scenic Areas (3.A) have objectives of 0-4 % Early Successional Habitat, while Management Prescriptions such as Dispersed Recreation Areas with Vegetation Management (7.E.2) and Management, Maintenance, and Restoration of Plant Associations (9.H) have objectives of 4-10% ESH. Management Prescriptions such as Designated Wilderness (1.A) and the Appalachian Trail Corridor (4.A) do not have any early successional objectives. Based on these objectives, this equates to a desired condition of a providing a minimum of 588 acres (2%) to a maximum of 2117 acres (6%) of early successional forest habitat for the analysis area as a whole. (see attached table).

Possible Management Practices/Opportunities

- Over the next decade, create 588 to 2117 acres of early successional habitat, well-distributed across the analysis area. This includes the creation of additional acres of high elevation early successional habitat. The greatest opportunities are in MRx 7.E.2, 8.A.1, and 9.H.

Related Forest Plan Goals/Objectives

- **GOAL 2** A diversity of habitat will be provided for the full range of native and other desired species. Sufficient amounts of interior or late-successional habitat as well as early-successional habitat will be provided to meet needs of all successional communities. Early successional habitat will be well distributed in all forest types, elevations, aspects, and slopes including riparian corridors.

- **GOAL 4** Maintain and restore natural communities in amounts, arrangements, and conditions capable of supporting viable populations of existing native and desired nonnative plants, fish, and wildlife species within the planning area.

    - **OBJECTIVE 4.1** Maintain 1 to 2 percent per decade of the riparian corridor within each 6th level hydrologic unit in early-successional forest conditions. Included would be only those prescriptions hosting riparian associated species as identified in the current

viability assessment for the Chattahoochee-Oconee NF and prescriptions with early-successional forest habitat objectives.

Inventory Needs

- Identify potential stands for early successional habitat during stand exams of the analysis area (approximately 30,000 acres).

MRx	Name	Acres	ESH Objective	Min Acres ESH	Max Acres ESH
1.A	Designated Wilderness	556	No Obj	0	0
3.A	National Scenic Area	4,245	<4%	0	170
4.A	Appalachian Trail Corridor	633	No Obj	0	0
4.F	Scenic Areas	1,110	<4%	0	44
4.F.1	Scenic and Wildlife Mgt Areas	27	<4%	0	1
4.F.2	Regional Forester Scenic Areas	1,212	<4%	0	48
4.H	Outstandingly Remarkable Streams	1,845	No Obj	0	0
7.E.1	Dispersed Recreation Areas	9,573	<4%	0	383
7.E.2	Dispersed Recreation Areas with Veg Mgt	4,360	4-10%	174	436
8.A.1	Mid-to-Late Successional Forests	2,852	4-10%	114	285
9.H	Mgt, Maintenance, and Restoration of Plant Associations	7,504	4-10%	300	750
Total		33,917		588	2,117

Resource Area: Terrestrial Wildlife Habitats- High Elevation Early Successional Habitat

Current Conditions – Much of the analysis area is over 3000 feet in elevation providing ample opportunities to manage for high elevation early successional habitat. However, there currently is only approximately 50 acres of high elevation early succession forest habitat in the analysis area, located south of Duncan Ridge at Fanny Gap. This was created through the Cooper Creek Early Successional Habitat Project which was completed in 2004-2005. A portion of the powerline rights-of-way along GA Highway 180 south of Wolfpen Gap also provides some additional high elevation early successional habitat.

Desired Future Conditions – Increase the availability of early successional habitat within the analysis area. This includes both regenerating forest stands and open woodland habitat.

Possible Management Practices/Opportunities

- Forest Plan modeling indicates that there are approximately 1414 acres in the analysis area with the potential to meet the objective of providing of high elevation early successional habitat.

- Over the next decade, create 500 to 1000 acres of additional high elevation early successional habitat, well-distributed across the analysis area. This includes creation of high elevation open woodland habitat. The greatest opportunities are along Duncan Ridge in MRx 7.E.2, and 9.H, and the Rocky Mountain area in MRx 8.A.1.

Related Forest Plan Goals/Objectives

- **GOAL 3** Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types.

    - **OBJECTIVE 3.8** Create and maintain an annual average of 300 acres above 3,000 feet elevation In early-successional habitats, achieving 3,000 acres within the first 10 years of Plan implementation. This acreage may be comprised of regenerating forests (0-10 years), utility rights-of-way, and open woodlands.

Inventory Needs

- Identify potential stands for High Elevation early successional habitat during stand exams of the analysis area (approximately 10,000 acres).

Resource Area: Terrestrial Wildlife Habitats- Open Woodland

Current Conditions – Woodland habitat is extremely rare on the Forest and there currently are no areas of open woodland habitat in the analysis area. Largely due to the lack of fire, xeric ridge tops and south-facing slopes where this habitat historically occurred are now dominated by closed-canopy stands with limited herbaceous development.

Desired Future Conditions – Open woodland habitat consists of stands with 60 percent or less canopy cover, limited woody understory, and a well developed herbaceous ground cover of native grasses and forbs. The desired conditions are to restore a component of this habitat to the xeric slopes of the analysis area.

Possible Management Practices/Opportunities

- Utilize a combination of timber harvest, prescribed burning (dormant and growing season), and selective herbicide use to create and then maintain 1000-1500 acres of open woodland habitat on suitable sites within the analysis area. Greatest opportunities are on xeric ridge tops and south-facing slopes of Duncan Ridge.

Related Forest Plan Goals/Objectives

- **GOAL 3** Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types.
    - **OBJECTIVE 3.4** Within the first 10 years of Plan implementation restore 10,000 acres of open woodlands, savannas, and grasslands on the Chattahoochee. Once created, maintain woodlands, savannas, and grasslands on a five-year burning cycle or less.

Inventory Needs

- Identify potential stands for open woodland creation during stand exams of the analysis area (approximately 30,000 acres).

Resource Area: Terrestrial Wildlife Habitats- Canopy Gap Creation

Current Conditions – The majority (76%) of the analysis area is in mid-to-late successional conditions and only 6% of the area is in stands meeting the minimum old-growth age. As a result, most of the mesic deciduous forest stands have closed-canopy conditions with limited structural diversity. This limits the suitability of these stands for species such as the cerulean warbler and other songbirds that require stands with well developed canopy gaps. Approximately 100 acres in the analysis area was treated in 2004-2005 with thinning and group selection harvest to enhance conditions for the cerulean warbler and associated species.

Desired Future Conditions – Mid-to-late successional mesic deciduous forests have a relatively open canopy and are structurally diverse with a well developed understory and midstory.

Possible Management Practices/Opportunities

- Forest Plan modeling indicates that there are approximately 2320 acres in the analysis area with the potential to meet the objective of increasing the structural diversity in closed-canopy mid-late successional forests.

- Use a variety of silvicultural methods such as thinning and group selection to create canopy gaps in mid-late successional mesic deciduous stands. Greatest opportunities are in the mesic stands on the north slope of Duncan Ridge and other north-facing stands in the analysis area.

Related Forest Plan Goals/Objectives

- **GOAL 7** Manage forest ecosystems to maintain or restore composition, structure, and function within desired ranges of variability.

    - **OBJECTIVE 7.1** Within 10 years of Plan implementation, increase structural diversity by creating canopy gaps within closed-canopied mid- and late-successional mesic deciduous forest, including old growth restoration areas.
        - 10,800 acres on the Chattahoochee

Inventory Needs

- Identify potential stands for canopy gap creation during stand exams of the analysis area (approximately 30,000 acres).

Resource Area: Terrestrial Wildlife Habitats- Non-Native Invasive Species (NNIS)

Current Conditions – Compete surveys for NNIS species has not been completed for the analysis area. However, there are several known NNIS populations within the analysis area. Treatment is ongoing for a large patch of Chinese privet and kudzu in the Sea Creek Falls vicinity. Scattered populations of autumn olive and privet are known to occur along some of the roads and wildlife openings in the analysis area.

Desired Future Conditions – Populations of NNIS species are controlled within the analysis area

Possible Management Practices/Opportunities

- Identify existing NNIS populations during botanical surveys of the analysis area.
- Control NNIS populations through both chemical and mechanical means.

Related Forest Plan Goals/Objectives

- **GOAL 12** Minimize adverse effects of invasive native and nonnative species. Control such species where feasible and necessary to protect national forest resources.

Inventory Needs

- Identify existing NNIS populations during botanical surveys of the analysis area. Areas of highest potential are along existing roads and trails and around wildlife openings, campgrounds and other highly disturbed areas.

Resource Area: Terrestrial Wildlife Habitats- Wildlife Openings

Current Conditions – The majority of the wildlife openings in the analysis area are in the Cooper Creek Wildlife Management Area and are managed by Georgia Department of Natural Resources personnel. There are approximately 50 openings totaling 100 acres on the WMA. In addition there are 6 openings totaling approximately 25 acres outside of the WMA that are managed by USFS personnel. Many are planted in high quality grass-clover mixtures, which include combinations of white and red clovers along with wheat, rye, oats, orchard grass, and ryegrass. Some of the older openings are dominated by fescue and/or annual weed species, and some of the recently renovated openings are planted to grain sorghum. Non-Native Invasive Species (NNIS) such as fescue and autumn olive are present in some of these openings.

Desired Future Conditions – Wildlife openings within the analysis area are maintained in desirable non-native or native grasses and forbs and provide optimal habitat conditions for a wide variety of game and non-game species. NNIS associated with wildlife openings are controlled.

Possible Management Practices/Opportunities

- Renovate existing wildlife openings to eliminate fescue and other undesirable species and establish native species or non-invasive desirable non-native species such as clover.
- Daylight forest stands adjoining wildlife openings (especially linear openings) to increase sun exposure in the openings and provide brushy cover adjacent to the openings.

Related Forest Plan Goals/Objectives

- **GOAL 2** A diversity of habitat will be provided for the full range of native and other desired species. Sufficient amounts of interior or late-successional habitat as well as early-successional habitat will be provided to meet needs of all successional communities. Early successional habitat will be well distributed in all forest types, elevations, aspects, and slopes including riparian corridors

- **GOAL 12** Minimize adverse effects of invasive native and nonnative species. Control such species where feasible and necessary to protect national forest resources.

Inventory Needs

- Inventory existing wildlife openings for the presence of NNIS.

Resource Area: Old Growth

Current Conditions – Approximately 6 % of the analysis area is comprised of stands that meet or exceed minimum old-growth age. In addition, there are 556 acres in the Cooper Creek watershed that are allocated to old-growth compatible Management Prescriptions (MRx 1.A – Designated Wilderness).

Desired Future Conditions – Stands currently meeting old-growth criteria are protected and portions of area are managed to provide for the development of old-growth in the future.

Possible Management Practices/Opportunities

- To meet Forest Plan requirements to maintain at least 5 percent of each 6th level HUC in old-growth conservation, designate approximately 209 acres in the Youngcane Creek Watershed, 319 acres in the Coosa Creek Watershed, and 1172 acres in the Coopers Creek watershed as small old-growth blocks. Give priority to those stands that currently meet minimum old-growth age. These areas will be managed to protect their old-growth characteristics during the Plan cycle.

Related Forest Plan Goals/Objectives

- **GOAL 9** Manage through protection, maintenance, or restoration, a variety of large, medium, and small old growth patches to provide biological and social benefits.

- **GOAL 20 (a)** Provide a well-distributed and representative network of large, medium and small potential old growth blocks in the Blue Ridge Mountains and Southern Ridge and Valley ecological sections.

    - **OBJECTIVE 20.1** Reserve 5 percent of each 6th level HUC that has at least 1,000 acres of National Forest in management that will conserve existing, or provide for the development of future, old growth.

- **GOAL 21** Restore formerly existing old-growth community types (composition, not structure) where ecologically appropriate.

Inventory Needs

- Evaluate stands that currently meet minimum old-growth age (approximately 2000 acres). Prior to any vegetation management projects that could negatively affect old-growth characteristics, sufficient data will be collected to determine if stands meet the four defining criterion for existing old-growth. If so, then priority will be given to these stands in satisfying the small old-growth block objective.

Resource Area: PETS and Locally Rare Species/Rare Communities

Current Conditions – There are 3 extant populations of the federally Threatened Small Whorled Pogonia in the analysis area, in addition to several other Sensitive and locally rare plants. Of particular significance in the analysis area is the presence of the bog turtle. The majority of the known locations for the bog turtle in Georgia occur in this analysis area. Most are on private land; however a population of bog turtles was established on National Forest lands in this analysis area in 2005.

There are several known rare communities within this analysis area. This includes Coosa Bald Cove (Forested Boulder Field, Basic Mesic Forest), and Blood Mountain (Rock Outcrops, High Elevation Bald). The Coopers Creek and Flat Creek Bog (Appalachian Highlands Bogs, Fens, Seeps, and Ponds) also are located in this analysis area. These areas are being actively managed by prescribed burning and/or hand cutting of competing woody vegetation to enhance conditions for bog dependent species. Native bog species also have been reestablished in these sites by transplanting and release.

Desired Future Conditions – Existing rare communities will be managed optimally for protection, restoration, and/or maintenance through the Rare Community Prescription (9.F) standards.

Possible Management Practices/Opportunities

- Continue to actively manage the two existing mountain bogs in the analysis area to maintain and enhance habitat conditions for bog dependent species, using controlled burning, hand cutting of competing vegetation, reestablishment of native species, and/or other appropriate methods.

Related Forest Plan Goals/Objectives

- **GOAL 15** Contribute to conservation and recovery of federally-listed threatened and endangered species through habitat maintenance and/or enhancement and, where possible, for their reintroduction into suitable habitats, and contribute to avoiding the necessity for federal listing of other species under the Endangered Species Act.
    - **OBJECTIVE 15.1** The objectives shown in Table 2- 3 are established to contribute to the recovery of threatened, endangered, and candidate plants over the life of the Forest Plan
    - **OBJECTIVE 15.2** Inventory non-native invasive aquatic species encroaching upon T&E habitat within the first 10 years of Plan implementation.
- **GOAL 16** Cooperate with the United States Fish and Wildlife Service (USFWS) and the Georgia Department of Natural Resources in providing habitat for the reintroduction of native wildlife, including threatened, endangered and sensitive species.
- **GOAL 17** Cooperate with Georgia Department of Natural Resources to transplant individuals of State-listed species threatened by destruction on private lands to appropriate National Forest sites.

- **GOAL 18** Cooperate with the USFWS, Georgia Department of Natural Resources (DNR), and academia in conducting research on National Forest T&E species and their response to management.

- **GOAL 19** Contribute to the conservation of State-identified locally rare species in cooperation with the Georgia Department of Natural Resources.

- **GOAL 44** Identify and delineate any rare communities found on Forest lands, and then incorporate them into management prescriptions 4.D or 9.F.

    - **Objective- 9.F.01** – Based on periodic monitoring of known rare community sites, identify management activities needed to maintain or restore characteristic structure, composition, and function of these communities, and implement an annual program of work designated to meet these needs.

Inventory Needs

- During project-level inventories, identify any rare communities present and implement the appropriate protective or enhancement measures.

- Prior to any ground disturbing activities, project-level inventories for PETS species will be conducted. Effects on federally listed species will be avoided. For Sensitive species, mitigating measures will be implemented to maintain habitat for these species on the Forest, and to prevent future listing under the Endangered Species Act. These strategies will assist in avoiding cumulative effects on PETS species and their habitats.

Resource Area: Aquatic Species and Habitats

Current Conditions – Cooper Creek and its tributaries are all high quality trout streams. A number of the streams such as Bryant Creek, Burnett Creek, Pretty Branch, Logan Creek, and Boardcamp Creek contain native brook trout. The remaining streams including Cooper Creek, Mulky Creek, and Sea Creek contain rainbow and brown trout. Coosa Creek also is a high quality rainbow trout stream. Stream habitat improvement projects have been completed in many of these streams with the assistance of Georgia DNR, student interns, and Trout Unlimited volunteers. The only lake on National Forest lands in the analysis area is Lake Winfield Scott, a 17 acre lake containing largemouth bass, rainbow trout, catfish, and bream.

Several Sensitive and Locally Rare Aquatic species occur or potentially occur in the analysis area. The Mountain Brook Lamprey (*Ichthyomyzon greeleyi*) and Eastern Hellbender (*Cryptobranchus alleganiensis*) are present in Coopers Creek. Hellbenders occur throughout the Tennessee River drainage in Georgia. However, the largest and most stable populations in the State occur in Coopers Creek.

Desired Future Conditions – Streams within the analysis area are managed to provide optimal habitat for trout and other aquatic species. Barriers to aquatic passage are reduced or eliminated. Brook trout are restored a portion of their historic stream reaches.

Possible Management Practices/Opportunities

- Continue stream habitat improvement projects throughout the analysis area. This includes maintenance of existing improvements and construction of new stream structures.
- Replace road culverts that are barriers to aquatic passage.
- Restore brook trout to selected streams in the analysis area.

Related Forest Plan Goals/Objectives

- **GOAL 26** Restore and/or maintain aquatic ecosystems in amounts, arrangements, and conditions capable of supporting viable populations of all native and desired nonnative species of aquatic flora and fauna within the planning area.
    - **OBJECTIVE 26.2** Inventory annually, on a representative sample basis, 10 percent of perennial stream miles for biota (including nonnative species) and/or habitat improvement needs.
    - **OBJECTIVE 26.3** Within ten years of Plan implementation assess fourth order or larger streams within National Forest ownership for barriers to stream biota passage. Prioritize identified barriers for mitigation.
    - **OBJECTIVE 26.4** Identify and prioritize streams for restoration of brook trout in cooperation with the Georgia DNR within six years of Plan implementation.

- **OBJECTIVE 26.5** Assess the approximately 300 acres of Forest Service owned lakes and ponds for habitat improvement needs for fish and amphibians within ten years of Plan implementation.

Inventory Needs

- Evaluate stream crossing in analysis area for barriers to fish passage
- Identify streams for brook trout restoration

Resource Area: Watershed Management

Current Conditions – The Watershed Condition Class for the Coopers Creek and Coosa Creek Watersheds are rated as good, while the Condition Class rating for Youngcane Creek is fair, due to impacts on private land downstream of the NF boundary. One State-listed sediment impaired stream (Lower Youngcane Creek) is present on private land in this watershed. On National Forest lands, there are approximately 12 miles of roads and 1.6 miles of hiking trails within 100 feet of a stream. These roads and trails are potential sources of sediment into the adjacent streams. In addition, a significant number of dispersed camping sites and fisherman access trails and parking areas are within the riparian corridor, which also contribute sediment into the area streams. Old roadbeds and illegal ATV trails also impact water quality where they occur.

Desired Future Conditions – Existing water quality impacts from roads and trails (authorized and unauthorized), dispersed campsites, and other sources are reduced within the analysis area.

Possible Management Practices/Opportunities

- Develop watershed restoration projects to address needs identified for closure and revegetation of old roads, illegal ATV trails, dispersed campsites and other problem areas. Particular efforts should be given to the impacts from dispersed camp sites on Coopers and Mulky Creeks.

Related Forest Plan Goals/Objectives

- **GOAL 22** Watersheds are managed (and where needed, restored) to provide resilient and stable conditions to support the quality of water necessary to protect ecological functions and support intended beneficial water uses.

- **GOAL 23** Manage instream flows and water levels by working with other agencies if possible to protect stream processes, aquatic and riparian habitats and communities, and recreation and aesthetic values.

- **GOAL 24** Maintain or restore soil productivity and quality.

    - **OBJECTIVE 24.1** Soil and water improvement needs are prioritized and restoration work is done annually based on field inventories and assessments. Improve watershed conditions across 500 acres per decade on the Chattahoochee-Oconee NF.

Inventory Needs

- Inventory the analysis area for potential watershed restoration projects.

Resource Area: Forest Health and Wood Products

Current Conditions- Current GIS data shows approximately 34,000 acres of stands susceptible host types for Southern Pine Beetle (SPB), Oak Decline, Gypsy Moths and Hemlock Woolly Adelgid. The risk of SPB attacks is high in the Coopers Creek Watershed. There are approximately 22,000 acres of host pine types in this watershed. There are approximately 4,000 acres of oak timber types that are susceptible to oak decline and Gypsy Moth in this watershed.

Desired Future Conditions- Improving forest health in over-crowded and fire-excluded stands to lower the risk of insect and disease infestation (particularly southern pine beetle) and reduce susceptibility to damaging wildfire. Restoring and/or maintaining native pine-hardwood forest types in areas that have been impacted by past southern pine beetle infestations and/or have a component of Eastern white pine. Restoring and/or maintaining native oak and oak-pine forest types in areas that have been impacted by past southern pine beetle infestations and/or in areas with high amounts of fire intolerant species such as maple, sweet gum, and Virginia pine.

Possible Management Practices/Opportunities

- Utilize prescribed burning to reduce stocking of encroaching hardwood competition in stands of shortleaf.
- Reduce basal areas mechanically through commercial timber sales to reduce the susceptibility of SPB in pine forest types.
- Reduce basal areas mechanically through commercial timber sales to remove suppressed, diseased and poor formed hardwoods to reduce susceptibility of Oak Decline and other hardwood diseases and gypsy moth.
- Control midstory species to encourage advanced oak regeneration by pre-harvest site preparation with herbicides to reduce competition to regenerating oaks and commercial timber sales.
- Conversion of offsite white pine stands to a species suitable for that site by commercial timber sale and artificial reforestation.
- Continue release of predator beetles and insecticide applications to combat Adelgid.
- Reintroduction of blight-resistant American chestnut as it becomes available.
- Provide a sustainable yield of forest products

Related Forest Goals/Objectives

- **OBJECTIVE 3.1** Within the first 10 years of Plan implementation restore 1,100 acres of shortleaf pine forests on the Chattahoochee on sites where they once likely occurred.

- **OBJECTIVE 3.2** Within the first 10 years of Plan implementation restore 1,000 acres of pitch pine forests on the Chattahoochee on sites where they once likely occurred.

- **OBJECTIVE 3.6** Within the first 10 years of Plan implementation restore oak or oak-pine forests on 1,250 acres on the Chattahoochee on appropriate sites currently occupied by pine plantations or other hardwood species such as gum and maple.

- **OBJECTIVE 3.7** To maintain existing oak and oak-pine forests, reduce stem density on 5,500 acres on the Chattahoochee of these forest types within the first 10 years of Plan implementation

- **GOAL 8** Contribute to maintenance or restoration of native tree species whose role in forest ecosystems: (a) has been reduced by past land use; or (b) is threatened by insects and disease, fire exclusion, forest succession, or other factors.

    - **OBJECTIVE 8.1** To maintain shortleaf pine forests on the Chattahoochee in desired conditions:
      Thin over-story trees on an average of 400 acres per year of this forest type. Reduce hardwood mid-story on an average of 6,000 acres per year of this forest type.

    - **OBJECTIVE 8.2** To maintain pitch pine forests on the Chattahoochee in desired conditions:
      Thin over-story trees on an average of 100 acres per year of this forest type.
      Reduce hardwood midstory on an average of 1,400 acres per year of this forest type.

- **GOAL 27** Provide a stable supply of wood products within the historic NF market area as an outcome of achieving non-timber objectives.

- **GOAL 28** Provide supplies of those wood products where the Forest Service is in a unique position to make an impact on meeting the demand; particularly high-quality raw material for specialty uses.

- **GOAL 40** Through appropriate management, reduce populations of native and nonnative pest species or vulnerability to them.

    - **OBJECTIVE 40**.1 Maintain forest-stocking levels at no more than 'fully stocked' for the species, age, and site quality with priority for treatment given to those vegetation communities at highest risk of insect or disease attack.
      • Reduce stem density on an annual average of 1,500 acres of overstocked loblolly pine stands on the Chattahoochee during the first 10 years of Plan implementation.
      • Reduce stem density on an annual average of 1,500 acres of overstocked shortleaf pine stands on the Chattahoochee during the first 10 years of Plan implementation.

    - **OBJECTIVE 40.2** Annually assess populations and trends of southern pine beetle.

    - **OBJECTIVE 40.3** Annually implement appropriate actions of the gypsy moth "Slow the Spread" (STS) strategy.

    - **OBJECTIVE 40.4** Within five years of Plan implementation, for forest pests with dynamic hazard rating systems available, and for which use data is currently available, dynamically rate all National Forest stands for existing and future hazard level.

- **OBJECTIVE 40.5** For forest pests with hazard rating systems currently available but which data not currently available, collect such data and rate all National Forest stands for hazard level within ten years of Plan implementation.

- **OBJECTIVE 40.6** For forest pests with hazard rating systems currently available, reduce hazard rating to moderate hazard levels or below and maintain for each pest within ten years of Plan implementation.

Inventory Needs

- Assess the stand type, condition class, boundaries and health of stands within Coopers Creek Watershed.

Resource Area: Fire Management -WUI/State and Private

Current Condition: The majority of these watersheds are classified as WUI (Wildland Urban Interface).

Desired Future Condition - Treat areas to provide for safety of public and firefighters, and to protect private property. Have more defensible space to help in suppression and firefighting efforts. Create Firewise Communities.

Possible Management Practices/Opportunities

- Work with Georgia Forestry Commission to identify private land holdings and explore opportunities to treat with prescribed fire under the Stevens Agreement.
- Identify and assist the state in supporting FIrewise community development.
- Treat NF lands with prescribed fire that are adjacent to these areas.

Related Forest Plan Goals/Objectives

- **GOAL 57** Keep firefighter and public safety the highest priority in all fire management operations.
- **GOAL 58** Reduce the risks and consequences of wildfire through fuel treatments that restore and maintain conditions of fire regime Condition Class 1 to the extent practicable.
    - **OBJECTIVE 58.1** Reduce extreme fire behavior characteristics and spotting distances by treating fuels to create a defensible space within designated wild land urban interface (WUI) zones.
    - **OBJECTIVE 58.2** Locate and designate zones specific to wildland urban interface (WUI) fire management issues to allow for prioritization of projects and funding based on protection needs and potential.
- **GOAL 59** Support local efforts to create solutions to hazardous fuel conditions, including development of tools or markets traditionally not cost effective.
- **GOAL 60** Determine values at risk and conduct fire management operations to minimize damage to resources.

Inventory Needs:

- Identify private land holds with the potential for prescribed fire treatment.
- Identify subdivisions with the potential to become FIrewise Communities, based on risk.

Resource Area: Fire Management -Prescribed Fire

Current Condition- Prescribe Fire usage has been very limited in the watersheds over the past 12 years. Some areas have been treated but have not been kept on a 3 to 7 year rotation. The primary Fire Regime is 1 (0-35 year fire frequency and low to mixed severity) and Condition Class 2 and 3 (Moderate and high departure from the historic regime). Due to the lack of large scale prescribed fires and fire suppression efforts, large accumulations of hazardous fuels are present throughout the water shed.

Desired Future Condition: Re-establish the historic fire return interval in the watershed to improve forest health and wildlife. Concentrate fire efforts to the dry- mesic oak sites and south and westerly aspects. Burn units to reduce white pine regeneration and increase oak regeneration . Convert woodland areas thru the use of growing season fire. Move the FRCC from a 3 to a 1. To reduce the hazardous fuels by 50%

Possible Management Practices/Opportunities:

- Develop landscape level burn units and burn the units on a 3 to 7 year rotation.
- Incorporate all vegetation management treatments and rotational burns to attain FRCC 1.
- Utilize natural barriers during suppression efforts to reduce ground disturbance, costs and to enhance resource benefits.

Related Forest Plan Goals/Objectives:

- **GOAL 57** Keep firefighter and public safety the highest priority in all fire management operations.
- **GOAL 58** Reduce the risks and consequences of wildfire through fuel treatments that restore and maintain conditions of fire regime Condition Class 1 to the extent practicable.
    - **OBJECTIVE 58.1** Reduce extreme fire behavior characteristics and spotting distances by treating fuels to create a defensible space within designated wild land urban interface (WUI) zones.
    - **OBJECTIVE 58.2** Locate and designate zones specific to wildland urban interface (WUI) fire management issues to allow for prioritization of projects and funding based on protection needs and potential.
    - **OBJECTIVE 58.3** Prescribe burn a three-year rolling annual average of 30,000 acres each year on the Chattahoochee and Oconee combined to meet plan goals and objectives.
- **GOAL 59** Support local efforts to create solutions to hazardous fuel conditions, including development of tools or markets traditionally not cost effective.

- **GOAL 60** Determine values at risk and conduct fire management operations to minimize damage to resources.

- **GOAL 61** Expand the role of fire to recover and sustain short interval fire-adapted ecosystems through the use of both prescribed and managed ignition fires, including allowing lightning-caused fire to function, as much as possible, as a natural process; especially in Wilderness or other custodial management areas.

Inventory Needs:

- Identify areas with potential for growing season opportunities. These areas will need plant surveys.

- Identify areas to utilize vegetation management and prescribed fire together

- Have predetermined containment areas identified for fire suppression.

Resource Area: Fire Management -Wildland Fire

Current Condition - Limited prescribe fire usage has led to the accumulation of hazardous fuel buildup, along with the effects from the SPB outbreaks and the HWA. The primary Fire Regime is 1 (0-35 year fire frequency and low to mixed severity) and Condition Class 2 and 3 (Moderate and high departure from the historic regime). Over the past 12 years, fire activity has been low to moderate in the watershed. This watershed has approximately 2% wilderness.

Desired Condition- Wildfires of low to moderate intensity with lower fuel loadings. Move the FRCC from a 2 &3 to a 1. Low intensity wildfires. Utilize natural barriers and MIST to allow fire to meet resource objectives while suppressing wildfire, until a Wilderness Fire Management Plan is developed.

Possible Management Practices/Opportunities:

- Reduce hazardous fuels buildup by develop landscape level burn units and burn the units on a 3 to 7 year rotation and incorporate vegetation management.
- Incorporate all vegetation management treatments and rotational prescribed burns to attain FRCC 1.
- Continue to work with Georgia Forestry Commission to support prevention and education events, like the Coopers Creek Hunts, FIrewise communities and monitor the progress of the counties' Community Wildland Fire Preparedness Plan (CWPP).
- Allow fires to burn naturally to meet wilderness resource objectives.

Related Forest Plan Goals/Objectives:

- **GOAL 57** Keep firefighter and public safety the highest priority in all fire management operations.

- **GOAL 58** Reduce the risks and consequences of wildfire through fuel treatments that restore and maintain conditions of fire regime Condition Class 1 to the extent practicable.

    - **OBJECTIVE 58.1** Reduce extreme fire behavior characteristics and spotting distances by treating fuels to create a defensible space within designated wild land urban interface (WUI) zones.

    - **OBJECTIVE 58.2** Locate and designate zones specific to wildland urban interface (WUI) fire management issues to allow for prioritization of projects and funding based on protection needs and potential.

    - **OBJECTIVE 58.3** Prescribe burn a three-year rolling annual average of 30,000 acres each year on the Chattahoochee and Oconee combined to meet plan goals and objectives.

- **GOAL 59** Support local efforts to create solutions to hazardous fuel conditions, including development of tools or markets traditionally not cost effective.

- **GOAL 60** Determine values at risk and conduct fire management operations to minimize damage to resources.

- **GOAL 61** Expand the role of fire to recover and sustain short interval fire-adapted ecosystems through the use of both prescribed and managed ignition fires, including allowing lightning-caused fire to function, as much as possible, as a natural process; especially in Wilderness or other custodial management areas.

- **GOAL 63** Manage fire in wilderness to benefit the wilderness resource and in accordance with the approved Wilderness Management Plans.

Inventory Needs:

- Identify areas with potential for growing season opportunities. These areas will need plant surveys.

- Identify areas to utilize vegetation management and prescribed fire together.

Resource Area: Recreation and Trails

Current Conditions

Developed Recreation

There are three developed campgrounds in the Cooper Creek watershed, Lake Winfield Scott, Cooper Creek and Mulky Gap. Lake Winfield Scott is a highly developed recreation complex that offers a campground with 35 sites, one group campground, a swimming site with beach, several picnic sites, two group picnic sites, boating site, rental cabin, a trailhead and more trail access points. This campground is currently under concessionaire through 12/31/2011. Cooper Creek and Mulky Campgrounds are located less than one mile apart and offer a similar less-developed camping experience. Cooper Creek has 15 sites and Mulky Gap has 11 sites. These two campgrounds are currently operated by the Forest Service. All three of these campgrounds recently addressed deferred maintenance needs by upgrading all or nearly all of the minor constructed features, replacing water systems and installing new vault toilets. All three campgrounds are considered popular areas with fishing, hunting, and camping being the primary activities. The Cooper Creek Scenic Area Trailhead is the only other developed recreation site in the watershed; it serves as a trailhead and angler access point. Developed recreation use in this area is considered moderate to high.

Trails

There are multiple hiking trails in the Cooper Creek watershed. There are no designated mountain bike, horse or OHV trail opportunities. The system trails are:

Trail Name	Trail Type	Trail Mileage (approx.)
Appalachian	Hiking	19.0
Duncan Ridge	Hiking	9.3
Benton Mackaye	Hiking	1.0
Slaughter Creek	Hiking	3.5
Jarrard Gap	Hiking	1.2
Wood's Hole Spur	Hiking	0.3
Yellow Mountain	Hiking	3.2
Millshoals	Hiking	2.4
Cooper Creek Connector	Hiking	0.4
Shope Gap	Hiking	0 .6
Cooper Creek Songbird	Hiking	1.3
Lake Winfield Scott	Hiking	0.6

There are additional non-designated routes being used for a variety of trail opportunities throughout the watershed. Trail use is considered moderate in this watershed.

Dispersed Recreation

Dispersed recreation in the Cooper Creek watershed encompasses all other activities not included in the developed recreation or trails section, including dispersed camping, fishing, hunting, picnicking, bird

watching, water-based activities and many others. A dispersed campsite inventory was completed in 2007. It documented 91 dispersed recreation campsites ranging in size, access method, environmental impacts, level of development and proximity to water sources. Busy weekends in this area are highlighted by extremely high use wherever there is easy access to water for fishing, swimming, picnicking and other forms of general forest enjoyment. Many of these access points and campsites are not in the optimal location and are causing environmental impacts. Dispersed recreation in this watershed is considered high and concentrated along road and stream corridors.

Desired Future Condition

Developed Recreation

The Lake Winfield Scott, Cooper Creek and Mulky Gap campgrounds and associated developed recreation areas will remain open and management attention given to address deferred maintenance project needs, support annual operation and maintenance efforts, increase occupancy and revenue and provide for public safety and enjoyment. The Lake Winfield Scott Recreation Area will be branded as a premier destination location for camping, picnicking and water-based recreation.

Campground capacity at all locations will be maintained with an analysis needed to determine the feasibility of relocating some campsites at Cooper Creek and Mulky Gap to reduce stream impacts. The analysis may include a capacity increase at that time.

Trails

All designated trails are financially and ecologically sustainable and maintained to established standards by volunteers or Forest Service personnel. Trailheads and trail access points are properly signed. Non-designated route trail use will be managed to reduce impacts where practical.

Dispersed Recreation

Dispersed recreation activities are being managed to provide for quality user experiences in an ecologically sustainable manner. Dispersed recreation activities do not encroach upon developed recreation locations.

Possible Management Practices/Opportunities

Developed Recreation

- Develop a marketing plan to increase visitation at Lake Winfield Scott and advertise the new and upgraded facilities.
- Find a good concessionaire or Forest Service will take back operation at Lake Winfield Scott.
- Implement a full hook-up loop at Lake Winfield Scott.
- Determine optimal campsite location at Cooper Creek and Mulky Gap campgrounds. Relocate/redesign sites near creek and explore opportunities for possible expansion.
- Reroute FSR #236 around Cooper Creek Campground.

Trails

- Duncan Ridge Trail Assessment. Determine the sustainability and maintainability of this 30 mile ridgeline trail.
- Cooper Creek Watershed Trails Assessment. Conduct a comprehensive trails assessment to include all trail user groups, access, non-designated routes and the current designated trails.

Dispersed Recreation

- Utilizing 2007 inventory, implement dispersed campsite management plan focused on resource protection and user experience. Goal should be no net loss of camping opportunities.
- Incorporate MVUM standards and apply to disperse recreation management plan.
- Relocate all day-use and angler access points from creek-side of roads.
- Establish day use parking areas to accommodate high use.

Related Forest Plan Goals/Objectives

- **GOAL 31** Provide a spectrum of high quality, nature-based recreation settings and opportunities that reflect the unique or exceptional resources of the Forest and the interests of the recreating public on an environmentally sustainable, financially sound, and operationally effective basis. Adapt management of recreation facilities and opportunities as needed to shift limited resources to those opportunities.

    - **OBJECTIVE 31.1** Recognize and respond to emerging recreation trends and uses within the Forest recreation niche by periodic assessments.

- **GOAL 32** Provide for the physical security of the forest visitor commensurate with the recreation setting.

    - **OBJECTIVE 32.1** Annually identify hazardous trees and plan for removal or mitigation within developed recreation facilities.

    - **OBJECTIVE 32.2** Develop and keep current cooperative agreements with local emergency services for law enforcement, search, rescue, and recovery operations through periodic review.

    - **OBJECTIVE 32.3** Provide wildlife-proof trash receptacles in concentrated recreation areas within five years of Plan implementation.

- **GOAL 33** For Regional Forester Scenic Areas, enhance, restore and create forest habitats as required for wildlife, rare plant communities and historic forest types.

- **GOAL 34** Trails do not adversely affect soil and water resources.

    - **OBJECTIVE 34.1** Prioritize OHV, horse and pack stock, bike, and hiking trails for condition surveys based on their risk of causing adverse effects, conduct surveys,

prioritize for remedial action those that are found to be adversely affecting soil and water resources, and correct those situations within five years of Plan implementation.

- **OBJECTIVE 34.2** For trails under Forest Service jurisdiction, bi-annually maintain to established standards:
  - 100 percent of designated OHV trails
  - 50 percent of trails open to horses
  - 50 percent of trails open to mountain bikes
  - 33 percent of foot trails

Inventory Needs

Developed Recreation

- Cooper Creek and Mulky Gap relocation or expansion project feasibility.

Trails

- Duncan Ridge Trail TRACS inventory (30 miles)
- Non-designated route inventory (unknown – 50 miles?)

Dispersed Recreation

- Ground truth 2007 dispersed recreation inventory
- Inventory day use access points along with potential day use parking areas.

Resource Area: Scenery Management

Current Condition

The Cooper Creek Watershed scenic resources should be described as Outstanding. Within the boundaries are contained:

- Coosa Bald National Scenic Area (portions of)
- Cooper Creek Regional Forester Scenic Area
- Cooper Creek Regional Forester Scenic and Wildlife Management Areas
- 1 Forest-Designated Scenic Area
- 2 Forest-Designated Outstandingly Remarkable Streams (2 sections of Cooper Creek)
- Appalachian National Scenic Trail Corridor (portions of)
- Duncan Ridge National Scenic Trail

Scenic areas are managed to protect and enhance the outstanding natural beauty, special ecological features, watershed integrity, mature forest habitat, scenic recreation opportunities, and other distinctive values. Forest health is maintained to protect the values for which the area was established, including scenery and recreation.

The Cooper Creek watershed is characterized by high recreation and trails use with the scenic resources interwoven as part of their recreation experience.

Desired Future Condition

Management activities are designed to meet or exceed the following Scenic Integrity Objectives:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	VH OR H	H	H	H	H	H	H

The landscape character is natural appearing with an intact, continuous forest canopy. Occasional gaps may occur in the canopy from the results of natural disturbances or management activities needed for wildlife species viability. Old-growth forest communities become part of the area over time. Understory vegetation includes a variety of native deciduous and evergreen flowering shrubs and wildflowers. These areas are managed with a focus on scenic values. In High SIO areas, activities may only repeat attributes of form, line, color and texture found in the existing landscape character.

Natural appearing managed change occurs, but affects a very limited area. Management changes are designed to be low-contrast with pre-treatment conditions and therefore compatible with the SIO. Active management may occur to moderate visual contrasts of natural change, but obvious evidence of human intervention in the appearance of the landscape is rare.

Vegetation manipulation may be used for scenic enhancement, such as the creation of vistas, creating parklike effects, enhancing fall color species, and limbing up trees. Enhancement activities could create openings for viewing wildlife, maintaining developed recreation facilities, or providing habitat to contribute to species viability including threatened, endangered, sensitive, or locally rare species habitat Uneven-aged forest communities will develop throughout the area including large, medium, and small patches of old growth forest communities.

These areas will be characterized by approximately 85 percent or more of the forest cover being mid-successional, late-successional, or potential old growth forests. Human-caused and naturally-created forest openings with trees less than 10 years old will occur on up to 4 percent of the land area of each aggregated or contiguous block of this management prescription. Medium and large-scale natural catastrophe will periodically create localized openings at smaller scales of from 5 to 1,000 acres. The range of canopy breaks includes common small gaps created by individual tree mortality, infrequent insect or disease killed groups up to several acres, infrequent timber harvest units of approximately 30 acres, and infrequent large contiguous areas of several hundred acres caused by storms or wildfire

Permanent openings are maintained, and the creation or expansion of wildlife openings may occur. Native species are emphasized when establishing food plants for wildlife. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Possible Management Practices/Opportunities

- Develop brochures targeting “Scenic Areas”
- Overlook and vista development.
- Utilize Southern Region Scenery Treatment Guide as a tool for mitigation of scenic resources during project implementation
- Establish “Friends” group to adopt Cooper Creek

Related Forest Plan Goals/Objectives

- **GOAL 29** Protect and enhance the scenic/aesthetic values and the Landscape Character of the National Forest lands in the Southern Appalachians, the Ridge and Valley and the Piedmont by meeting all adopted Scenic Integrity Objectives on Forest Service lands within individual management prescriptions.
    - **OBJECTIVE 29.1** Maintain and update the Scenery Management System. Updates will be accomplished in the course of site-specific project analysis.
    - **OBJECTIVE 29.2** Within 12 years of Plan implementation, map the seen area for the Forests’ existing nationally designated trails, including any trails added since plan implementation, using computerized tools.

- **OBJECTIVE 29.3** Within ten years of Plan implementation, raise the scenic integrity in areas where the inventoried Existing Scenic Integrity condition is Low, Very Low, or unacceptably low and improvement is within Forest Service control and otherwise feasible.

- **OBJECTIVE 29.4** Within ten years of Plan implementation, improve amenities and views within high use areas, vista points, and along interpretive trails.

- **GOAL 30** Provide a variety of Landscape Character themes with the predominant themes being Natural Appearing, Natural Evolving, and variations of these themes.

Inventory Needs

- Identify locations for overlooks and vistas

- Streams and water bodies are periodically inventoried and monitored on an individual stream basis to characterize conditions or trends. Streams and water bodies are protected from adverse effects.

- Inventories will be conducted to identify significant heritage resources requiring monitoring and protection. Priority of heritage resource inventory areas within the scenic designation will focus on known heritage resources, probability of the area containing significant heritage resources, and areas of popular use such as trails and campsites.

Resource Area: Wilderness

Current Condition**:** Approximately 556 acres of the Blood Mountain Wilderness are located within the Cooper Creek watershed. The area is characterized by high-elevation upland hardwood and cove forests, with numerous springs and seeps. Sections of both the Appalachian National Scenic Trail and the Duncan Ridge National Recreation Trail pass through the watershed portion of the Wilderness, as does part of the Slaughter Creek Trail . Recreation use in the Wilderness tends to concentrate along these corridors, in the form of hiking and backpacking. The Appalachian Trail corridor in particular receives a very high year-round use. Some hunting takes place in this part of the Wilderness. The primary impacts to the wilderness character of the area come from these recreation uses. Over the last several years, certain trail sections have been relocated, camping has been restricted in Slaughter Gap and adjacent to Lance Creek, and a campfire ban has been enforced along a portion of the Appalachian Trail in this area, all with the goal of reducing resource impacts. Occasional illegal OHV trespasses occur, mostly between Jarrard Gap and Woody Gap.

Desired Future Condition**:** The overall character of the Blood Mountain Wilderness portion of the watershed will continue to reflect that naturally-occurring processes are the primary influence on the biological and physical resource. Old-growth characteristics will become more evident over time. Existing recreational uses associated with trails in the area will be managed to limit human impacts. No development of additional recreational facilities will occur, unless they are determined to be necessary to restore or maintain the wilderness character of the area. Management of NNIS, fire, and other resource functions would be based on this premise as well.

Possible Management Practices/Opportunities:

- Monitor the wilderness resource with full-time District Wilderness Ranger.
- Work with volunteer organizations such as SAWS and area universities to provide additional wilderness staffing.
- Respond to illegal vehicle incursions with enforcement and route blocking.
- Continue scheduled wilderness campsite inventories.
- Initiate restoration actions based on campsite inventory information.
- Enforce campfire ban in the Neels Gap-Slaughter Creek Trail corridor.
- Disseminate LNT information to trail users via Wilderness Ranger, GATC Ridgerunner, and trailhead information boards.
- Determine need for and numbers of Outfitter and Guide activities in the Wilderness trail corridors.
- NNIS eradication as needed.

Related Forest Plan Goals and Objectives:

- **GOAL 35** Provide the primitive or semi-primitive recreation experiences that are not available on other land ownerships.

- **GOAL 36** Wilderness areas are managed to provide their full range of wilderness resource benefits. Wilderness study areas (areas that have been recommended to Congress for designation) are managed to conserve their roadless characteristics.

    - OBJECTIVE 36.1 Develop the various wilderness plans for each existing designated wilderness, or additional wilderness designated prior to that date, within 15 years of Plan implementation. Examples of the required plans are the fire management plan and wilderness management plan.

- **GOAL 37** Obtain full public ownership of National Forest lands within wilderness boundaries, including subsurface rights.

- **GOAL 38** Manage wilderness, roadless, and other un-roaded areas to provide the social and ecological benefits that only they can offer.

Inventory Needs:

- Continuation of Wilderness Campsite Inventories on a five-year rotation (next inventories scheduled for 2012).

Resource Area: Conservation Education

Current Condition: Conservation information is provided on trailhead information boards located at Lake Winfield Scott, Woody Gap, Neels Gap, and Vogel State Park. Each of those locations serve trails that access the watershed. LNT and other messages are provided to AT corridor users one-on-one by the seasonal Ridgerunner, seasonal Wilderness Rangers (when funded), and district personnel. The Georgia DNR provides some conservation information at the check station for the Cooper's Creek Wildlife Management Area. Some information is provided on information boards in the Cooper Creek and Mulky developed campgrounds. An information board is also located at the Cooper Creek Scenic Area parking lot. The forest web page has conservation education messages that are applicable to the watershed. Conservation education information is provided at the District Office by face-to-face contact and by responding to telephone and e-mail information requests.

Desired Future Condition: Conservation education will continue to be provided as noted in the Current Conditions. New and/or updated materials will be provided at information boards. More integrated education efforts with DNR will take place. Campground hosts will have materials and information related to, for example, frontcountry LNT and other messages that they will provide. Vegetation Management, Wildlife Management, and Fire Management messages will be provided as part of the overall program.

Possible Management Practices/Opportunities:

- Timely provision of information about current projects or conditions in the watershed.
- Conservation Education programs delivered at the developed campgrounds and/or check station by agency personnel, intern projects, volunteers.

Related Forest Plan Goals/Objectives:

- **GOAL 65** Contribute to public knowledge and understanding of land stewardship issues, strategies, and activities; especially biological conservation.
    - **OBJECTIVE 65.1** Initiate and facilitate the cooperation of local resources in developing and implementing education relating to use and/or prevention of fire.
    - **OBJECTIVE 65.2** Communicate what it takes to sustain healthy soil, water, air, and forest ecosystems.
    - **OBJECTIVE 65.3** Work with under-served urban and rural publics, especially outside the proclamation boundary, to introduce nature and inform about National Forest programs and services.

- **GOAL 66** Increase urban and rural public awareness, knowledge, understanding, appreciation, and involvement (participation) in Forest Service resource management activities and challenges.

    - **OBJECTIVE 66.1** Integrate a conservation education and interpretation component into key forest projects with a high potential for public education, as appropriate.

- **GOAL 67** Be a respected, credible voice and opinion leader in natural resources issues and adaptive natural resource management strategies and tactics applicable to the national forest.

    - **OBJECTIVE 67.1** Build and maintain working relationships with other Federal and State agencies with a conservation mission, public and private schools and universities, non-profit organizations and professional resource management and educational associations.

- **GOAL 68** Manage the conservation education and interpretive services programs to be cost-sensitive and avoid duplication with other providers whether in public or private sector.

- **GOAL 69** Use web technology effectively.

<u>Inventory Needs</u>

- Survey of campground visitors to determine interest in having education programs provided on a scheduled basis.

Resource Area: Lands, Special Uses, and Minerals

Current Condition

Lands

National Forest System lands occupy approximately 34,018 acres within the Cooper, Youngcane, and Coosa Creek watersheds. There are currently 65 miles of boundary line between National Forest System land and adjacent private property. There are approximately 350 property corners that delineate these property lines. These property lines were last maintained in several segments between the years of 1982 and 1993.

Special Uses

There are several special use permits that are active in the Cooper Creek Watershed including 8 water uses, 4 fly fishing guides, and 2 youth camps that conduct overnight backpacking trips. In addition, the US Army uses portions of this watershed to conduct training as part of the Camp Merrill, 5th Ranger Training Battalion ranger school. This includes aerial and ground operations and is administered through a Memorandum of Understanding (MOU), which is currently under revision, rather than a special use permit.

Minerals

There are no known mineral permits being administered within the Cooper Creek watershed.

Desired Future Condition

Lands

Since some private land exists within the watershed, it would be desirable to acquire as much as possible to try to consolidate federal property, especially where small private inholdings exist. All land line boundaries between private and NFS land should be maintained on a 10 year rotation to ensure that the property boundary is maintained to standard.

Special Uses

Water uses within this watershed will be phased out over time per regional direction. Numerous outfitter guide opportunities exist within the watershed and continued growth would be welcomed as long as the resources can sustain the added use that this type of business brings and the increased volume of forest users does not cause unreasonable negative impacts to the experience of casual (non-guided) users. Improved communication between the US Army and the Forest Service would help ensure that conflicts between military training and forest management are minimized.

Minerals

The Forest has no intention to develop a mineral permit or lease program.

Possible Management Practices/Opportunities

Lands

The Forest Service will continue to try to consolidate Forest land ownership within this watershed as opportunities arise through land exchange with private property owners. In addition, the 65 miles of boundary lines will need to be maintained, including repainting the established property boundary markings, maintaining corner monuments and records, and resurveying those sections where the boundary markings do not exist.

Special Uses

Water uses within this watershed will be phased out when the properties change hands according to regional direction. Outfitter/guide permits will continue to be evaluated on a case by case basis. The Forest Service will continue to administer the use of NFS lands by the US Army as outlined in the MOU. Revision and amendment of the MOU will continue as needed based on the training needs of the Army and resource protection and management needs of the Forest Service.

Minerals

The Forest does not expect any change in the demand or desire for additional mineral permits or leases.

Related Forest Plan Goals/Objectives

Lands

- **GOAL 81** Maintain a proactive program of land acquisition through exchanges and purchases. Land will be acquired primarily to meet resource management needs while following the Land Ownership Adjustment Plan with an overall goal of consolidation.
    - **OBJECTIVE 81.1** The ownership status of National Forest lands will be maintained annually in the GIS database.
    - **OBJECTIVE 81.2** Forest Plan land allocation status will be maintained annually in the GIS database in conjunction with the ownership status.
    - **OBJECTIVE 81.3** Obtain 50 percent of available in-holdings on the Forest within 15 years of Plan implementation.
    - **OBJECTIVE 81.4** Acquire all known needed rights-of-way within 15 years of Plan implementation.
    - **OBJECTIVE 81.5** Acquire additional lands along rivers to facilitate nature-based recreational uses, as well as to provide habitat for aquatic biota with an emphasis for aquatic T&E species or for the reintroduction of native species.

- **GOAL 82** Divest those properties through land exchange that are isolated, impacted by urban influence, and generally not conducive to National Forest management and therefore more suitable in private ownership.

- **GOAL 83** Inadvertent trespass onto National Forest does not occur.

    - **OBJECTIVE 83.1** Property lines will be surveyed and marked to Forest Service standard and maintained on a 10-year rotation.

- **GOAL 84** Resolve all known title claims and encroachments affecting National Forest System lands.

    - **OBJECTIVE 84.1** Title claims and encroachments affecting National Forest System lands are to be documented, prioritized for resolution each fiscal year, and resolved within the constraints of the applicable authority.

- **GOAL 85** Acquire or exchange accesses with other agencies, counties, and private interests to ensure management objectives are met for all ownerships.

- **GOAL 86** Identify opportunities to work with other agencies and organizations to participate in mitigation banking activities.

Special Uses

- **GOAL 54** All designated and other utility corridors and designated communication sites will minimize environmental, social and visual impacts and ensure benefit to the public.

    - **OBJECTIVE 54.1** Process energy-related leases, licenses and permits within 90 days of the date the applicable decision document is approved.

- **GOAL 55** Manage special uses consistent with protection of natural resource values, public health and safety, and cost effectiveness.

    - **OBJECTIVE 55.1** Process each special use application through initial screening within 30 working days.

    - **OBJECTIVE 55.2** Maintain current data on each special use in the Special Use Data System (SUDS) database or equivalent as of the end of each fiscal year.

    - **OBJECTIVE 55.3** Maintain current annual or periodic inspections on each special use permit.

    - **OBJECTIVE 55.4** Offset costs of environmental analysis for noncategorical exclusion special use projects by collecting funds from the proponent.

- **GOAL 56** Minimize the National Forest land area affected by special use permits and their conflicts with other National Forest values.

Minerals

- **GOAL 52** Meet demands for energy and non-energy minerals consistent with Forest Plan management prescriptions, multiple-use objectives, and in accordance with existing laws and regulations.

- **GOAL 53** Acquire mineral rights that were reserved, but for which there has been no minerals activity; that is, the right has not been used.

Inventory Needs

Lands

- The quality of GIS data for planning and mapping can be improved when discrepancies are encountered.

Special Uses

- There are some GIS data gaps for special use permits and continued development of spatial data is a need.

Resource Area: Cultural Resources

Current Condition

These three HUC's include 60,371 acres and according to the information in GIS approximately 3,970 acres within these watersheds have been previously surveyed or reviewed in 17 different reports and documents. Approximately 6% of the National Forest within this watershed has been surveyed for cultural resources. The previous surveys have been for past timber sales, roads, land exchanges, SPB salvage, prescribed burning, recreation area improvements, and trails. There are currently 121 sites including four cemeteries known to exist within this Cooper Creek Watershed. There are 39 known prehistoric sites, 64 historic sites, and 18 unknown sites. A total of 16 sites are recommended as eligible for the National Register and protection and avoidance from proposed activities is also recommended. Thirty-one sites are recommended as ineligible for the National Register, and 74 sites have an unknown National Register status. These 74 sites are given a protective status until otherwise determined ineligible. There are four known cemeteries in the watershed although they are not eligible for the National Register; they are given a protective status. Only sites on National Forest land were included in this summary.

Desired Future Condition

The desired future condition of these watersheds is to have all sites recorded and identified and protective buffers around each one that is eligible or have an unknown National Register status. The 74 sites with an unknown status would require a revisit and update of official Georgia State site forms which includes site documentation, mapping, and minimal testing to determine National Register eligibility.

Possible Management Practices/Opportunities

Historically, within this Cooper Creek watershed, the extinct community of Mulky Creek was a dispersed mountain farm community existing from 1857 until 1919. It was located along Mulky and Cooper Creeks. Population expanded in the 1870s; there was a school house, law grounds, and a post office. The farmers grew wheat and rye, some of which went into whiskey. They grazed cattle, sheep, and hogs on wooded slopes above their fields. Sheet erosion took off topsoil as loggers cleared the slopes and ridges. Cotton farming on the Piedmont took the settlers away, so only a lumber company caretaker remained in 1919 (Brender and Merrick 1950). This then became the Toccoa Experimental Forest, now it is incorporated within the Blue Ridge Ranger District of the Chattahoochee National Forest (Wynn et al. 1994). At the time of acquisition, the largest logging companies and landowners in the watershed and vicinity were Phister and Vogel Land Company, Shippen Brothers, and A. and N.W. Gennett. These tracts were acquired for the National Forest from approximately 1915 - 1937. Opportunities exist to continue to add historical data to the extinct Mulky creek community, by locating and documenting additional historic sites to our database, and continuing to research this extinct historic community.

Archeological testing of other potential sites that are recommended as eligible or unknown National Register status could also be undertaken.

Related Forest Plan Goals and Objectives

- **Goal 77** – Significant heritage resource values are identified, enhanced, interpreted, and protected through a systematic program of heritage resource inventory, evaluation, and preservation along with coordination with the public, scientific community, ethnic groups and interested federally-recognized tribal governments such that heritage resource management concerns are integrated into all plans and projects.

    - **Objective – 77.2** – Partnerships are developed with external organizations, groups, tribes, and individuals to encourage public service through heritage resources projects

    - **Objective – 77.3** - Reduce the existing backlog of heritage sites needing formal evaluation and nomination to the National Register of Historic Places, so that the overall number decreases each year.

    - **Objective – 77.5** - Refine and field validate the GIS-based predictive model of heritage site occurrence probability and recreation impact risk within eight years of Plan implementation.

    - **Objective 77.6** – Provide protection for all significant heritage sites that preserves the integrity of scientific data they contain, for the benefit of the public, tribal, and scientific communities. Cooperate with primary partners and scientific communities in preservation and interpretation of certain heritage resources to the public.

    - **Objective 77.7** – Develop and maintain and accurate, secure, geo-spatial electronic database with site and survey data within eight years of Plan implementation

Inventory Needs

- Continue to survey projects prior to implementation
- Continue to update GIS records, maps, historical data, etc
- Additional testing and documentation of at least 74 legacy sites with unknown NR status

The district Atlas maps were updated during this assessment and all current data was added to those maps. The GIS sites database has been updated with all locations on the atlas maps to include all sites or isolated finds. All new site locations need to be updated into GIS as well.

References Cited

Brender, Ernst V., and Elliott Merrick. 1950. Early settlement and land use in the present Toccoa Experimental Forest. The Scientific Monthly, Vol. LXXI, No 5, November 1950, 318-325.

Wynn Jack T., Rebecca E. Bruce, and Lee L Certain. 1994Past Present and Future; Cultural Heritage Management on the Chattahoochee-Oconee National Forests, Georgia. Gainesville, GA.

Resource Area: Roads

Current Conditions

The table below shows miles of roads by maintenance level for each watershed as identified in INFRA.

Watershed	Level 1 mileage (Closed roads)	Level 2 mileage (High clearance)	Level 3 mileage (Passenger cars)	Level 4 mileage (Moderate comfort)	Level 5 mileage (High comfort)
Coopers Creek	0.5	33.0	21.7	0.7	1.6
Coosa Creek	1.2	8.7	1.7	0	0
Youngcane Creek	0	6.0	0	0	0
Totals	**1.7**	**47.8**	**23.4**	**0.7**	**1.6**

Within these three watersheds, there are nearly 200 drainage structures that carry water. Ninety-five percent are corrugated metal pipes (CMP) while two percent are bridges and three percent are fords.

Desired Future Condition

The desired future condition of these watersheds is to have a transportation system that supplies the public, the Forest Service, and other authorized users with a safe, environmentally sustainable, equitable, financially sound, and operationally effective access to the National Forest.

Possible Management Practices/Opportunities

- Conduct a District-Wide Transportation Analysis Process (TAP) and implement access management decisions accordingly within the Coopers Creek Watershed. Once a sustainable transportation system is designated, strive to achieve Forest Plan Objective 48.2 – Periodically maintain roads under Forest Service jurisdiction to maintenance level standards per the schedule below:
    - 100 percent of maintenance level 5 roads annually
    - 50 percent of maintenance level 3 and 4 roads annually
    - 25 percent of maintenance level 1 and 2 roads annually

Related Forest Plan Goals and Objectives

- **Goal 47** – Provide a transportation system that supplies the public, the Forest Service, and other authorized users with a safe, environmentally sustainable, equitable, financially sound, and operationally effective access to roaded portions of the National Forest.
- **Goal 48** – Roads do not adversely affect soil and water resources
- **Goal 49** – Close and restore unneeded roads and motorized trails

Inventory Needs

- The drainage area for each existing culvert needs to be determined to see which ones are undersized. Some may have to be replaced by a bridge or open bottom culvert.
- Identify and GPS any undesignated or “ghost” roads that are not currently recorded in the database of record (INFRA).

Cooper Creek Watershed Assessment
Summary of Possible Management Practices/Opportunities

Possible Management Practices	Amount	Plan Goals/Objectives
Create early successional habitat, including high elevation ESH	600-2100 acres	Goal 2, 3, 4 /Obj. 3.8, 4.1
Create open woodland habitat	1000-1500 acres	Goal 3/Obj. 3.4
Create canopy gaps in mesic deciduous stands	1000-1500 acres	Goal 7/Obj. 7.1
Renovate and daylight existing wildlife openings	125 acres	Goal 2,12
Reduce encroaching hardwood competition in native shortleaf pine stands	200 acres	Goal 8/Obj. 8.1
Thin pine stands to reduce SPB risk	1,000 acres	Goal 8, 40/Obj. 8.1,8.2, 40.1
Thin hardwood stands to reduce oak decline and gypsy moth risk	16,000 acres	Goal 3/Obj. 3.7
Convert off-site white pine to oak/oak-yellow pine stands	5,000 acres	Goal 3/Obj. 3.1, 3.2, 3.6
Control mid-story to encourage advanced oak regeneration	15,000 acres	Goal 3/Obj. 3.7
Inventory and treat non-native invasive species (HWA, NNIS)	TBD	Goal 12
Designate 5% of watershed in small-old-growth blocks	1700 acres	Goal 9,20(a),21/Obj. 20.1
Manage existing mountain bogs	12 acres	Goal 15, 16, 17, 18, 19, 44/Obj. 15.1, 15.2, 9.F.01
Enhance stream habitat conditions for brook trout and other aquatic species	50 miles	Goal 26/Obj. 26.2, 26.4, 26.5
Replace culverts that are barriers to aquatic passage	TBD	Goal 26/Obj. 26.3
Reduce water quality impacts from old roads, illegal ATV trails and dispersed camping areas	100 acres	Goal 22, 23, 24/Obj. 24.1
Develop landscape levels burn units and burn on a 3 to 7 year rotation as ecologically appropriate	10,000 acres	Goal 58/Obj. 58.3
Work with GFC to reduce wild fire risk in the Wildland Urban Interface	TBD	Goal 58/Obj. 58.1, 58.2
Increase Visitation at Lake Winfield Scott Rec Area/Implement a full hook-up loop		Goal 31/Obj. 31.1
Develop master plan for Coopers Creek and Mulky Campgrounds		Goal 31/Obj. 31.1
Conduct Comprehensive Trails Assessment		Goal 34/Obj. 34.1, 34.2
Relocate or improve dispersed campsite, day-use and angler parking from creek side of roads		Goal 34/Obj. 34.1
Improve trail head parking as necessary		Goal 32
Respond to illegal vehicle incursions in Wilderness with enforcement and route blocking		Goal 35, 36, 38
Continue Wilderness Campsite inventories and		Goal 36/Obj. 36.1

initiate restoration actions		
Provide Conservation Education programs including Leave-No-T race information		**Goal 65, 66, 67/Obj. 65.1, 65.2, 65.3, 66.1, 67.1**
Maintain land line boundaries	**65 miles**	**Goal 83/ Obj. 83.1**
Document historic sites in the extinct Mulky Creek Community		**Goal 77/Obj. 77.6**
Complete archeological testing of sites that are recommended as eligible or of unknown National Register status		**Goal 77/Obj. 77.3**
Complete a Transportation Analysis Process for the watershed to provide a road system that is ecologically, socially, and economically sustainable		**Goal 47, 48, 49, 50/Obj. 48.1, 49.1**

Summary of Public Involvement

The district held a public meeting to discuss the Cooper Creek Watershed Assessment on August 9, 2011 at the Georgia Mountain Research and Education Center in Blairsville. The meeting was attended by 24 members of the public including representatives from Trout Unlimited, Mountain High Hikers, Georgia Chapter of the Sierra Club, Georgia Forest Watch, Cooper Creek Sportsman, The Ruffed Grouse Society, Back Country Horsemen, Georgia Appalachian Trail Club, Georgia DNR, Georgia Forestry Commission, as well as several adjacent landowners and local residents. District Ranger Andy Baker provided a brief overview of the project. Following the presentation, the district staff entertained questions in small breakout groups. The attendees were provided with a form that could be used to provide additional comments.

Written comments were received from 2 individuals. One expressed support for the creation of early successional habitat, open woodland habitat, canopy gaps, the daylighting of wildlife openings, stream habitat enhancement, and prescribed burning throughout the watershed. The second individual expressed support for improvements in trailhead parking, protection of cultural resources, and streamside restoration, and expressed concern over smoke management issues related to prescribed fire.